The Claims:

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1.   (previously presented): A method for accessing I/O devices in embedded control environments, the method comprising:

remotely attaching said I/O devices to an embedded microprocessor; and

mapping said I/O devices resources to said microprocessor's address or memory address space.

2.   (previously presented): The method according to claim 1 further comprising selecting said I/O devices from the group consisting of Universal Asynchronous Receiver/Transmitter (UART), Universal Serial Bus (USB), Joint Test Action Group (JTAG), and IC Bus (I^2C).

3.   (previously presented): The method according to claim 1 wherein said mapping step is performed by a device abstraction layer (DAL).

4.   (previously presented): The method according to claim 3 wherein said DAL is implemented via extra embedded control hardware.

5.   (previously presented): The method according to claim 3 wherein said DAL is implemented via software.

6.   (previously presented): The method according to claim 4 further comprising redirecting by said extra embedded control

hardware, requests and responses over a link to a remotely attached device.

7.   (previously presented): The method according to claim 5 wherein said microprocessor has a memory management unit, and further comprises said DAL using said memory management unit to cause a program exception by an exception handler.

8.   (previously presented): The method according to claim 7 further comprising executing with a thin layer device provided in the context of said exception handler.

9.   (previously presented): The method according to claim 7 further comprising generating an exception during instruction execution upon accessing a virtual resource unit.

10.   (previously presented): The method according to claim 9 wherein said microprocessor has a management unit, and further comprises generating with the management unit, an exception upon execution of a privileged instruction.

11.   (previously presented): A computer system for accessing I/O devices in embedded control environments, said I/O devices being remotely attached to an embedded microprocessor, said system comprising a device mapping said I/O devices' resources to said microprocessor's address or memory address space.

12.   (previously presented): The computer system according to claim 11 wherein said device is a device abstraction layer (DAL).

13.   (previously presented): The computer system according to claim 12 wherein said DAL is implemented via extra embedded control hardware.

14. (previously presented): The computer system according to claim 12 wherein said DAL is implemented via software.

15. (previously presented): The computer system according to claim 14 further comprising resources available to said DAL, and wherein said software is adapted to cause a program exception as soon as said resources are accessed.

16. (previously presented): The computer system according to claim 15 further comprising a thin layer device abstraction causing said program exception.

17. (previously presented): A program product for accessing I/O devices in embedded control environments, said I/O devices being remotely attached to an embedded microprocessor, said program product comprising:

a computer readable medium having recorded thereon computer readable program code performing the method comprising:

mapping said I/O devices resources to said microprocessor's address or memory address space.

18. (previously presented): The program product according to claim 17 wherein said method further comprises selecting said I/O devices from the group consisting of Universal Asynchronous Receiver/Transmitter (UART), Universal Serial Bus (USB), Joint Test Action Group (JTAG), and IC Bus (I^2C).

19. (previously presented): The program product according to claim 17 wherein said mapping step of said method is performed by a device abstraction layer (DAL).

20.   (previously presented): The program product according to claim 19 wherein said DAL is implemented via extra embedded control hardware.

21.   (previously presented): The program product according to claim 19 wherein said computer readable program code includes computer readable program code for implementing said DAL.

22.   (previously presented): The program product according to claim 21 wherein said method further comprises redirecting requests and responses over a link to a remotely attached device.

23.   (previously presented): The program product according to claim 22 wherein said method further comprises said DAL causing a program exception by an exception handler.

24.   (previously presented): The program product according to claim 23 wherein said method further comprises said DAL causing a program exception by a thin layer device provided in said exception handler.

25.   (previously presented): The program product according to claim 23 wherein said method further comprises generating an exception during instruction execution upon accessing a virtual resource unit.

26.   (previously presented): The program product according to claim 25 wherein said method further comprises generating an exception upon execution of a privileged instruction.